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# COORDINATION QUESTIONS: INTERNATIONAL COOPERATION IN THE FIELD OF INFORMATICS

## Harmonization and improvement of United Nations informatics systems for optimal utilization and accessibility by all States

## Report of the Secretary-General

SUMMARY

In its resolution 1991/70, the Economic and Social Council requested the Secretary-General to prepare, within existing resources and in consultation with representatives of States, a study analysing the causes of the current situation with respect to United Nations informatics systems and providing an outline of a rapid solution to the problem, leading to easy, economical, uncomplicated and unhindered access to United Nations computerized databases and information systems and services, which are of great importance to all States, in particular to the developing countries.

In addition to containing an analysis of the causes of the present situation, the present report summarizes the results of a questionnaire submitted to all missions of Member States in New York and Geneva and describes the status of the most-requested United Nations databases, as well as the database activities of the regional commissions. Those activities undertaken in immediate response to resolution 1991/70 are discussed, and problems still to be addressed are identified, namely, the need for

* E/1992/100.

user-friendly access, the need for a continuous flow of information to Member States, the need to provide easier physical access to databases, the need for training, the need for policy coordination and the need to expand the on-line access process beyond the Organization to the United Nations system as a whole.

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## INTRODUCTION

1. In its resolution 1991/70, the Economic and Social Council requested the Secretary-General to prepare, within existing resources and in consultation with representatives of States, a study analysing the causes of the present situation with respect to United Nations informatics systems and providing an outline of a rapid solution to the problem, leading to easy, economical, uncomplicated and unhindered access to United Nations computerized databases and information systems and services, which are of great importance to all States, in particular to the developing countries.

### Causes of the present situation

2. The convergence of the availability of comparatively inexpensive microcomputer technology with the advent of constantly declining prices for use of global telecommunications networks has provided missions with the ability to acquire the resources needed for access to United Nations databases. However, several of the major databases were designed and implemented in the 1970s, when the available database software packages were not designed for easy retrieval by non-technical users. In addition, each database was conceived and implemented independently of the others, over a span of two decades, using different software. Not only was each system developed by a different substantive office, but each target audience was presumably different as well. Therefore, prior to the advent of microcomputers, there was little or no impetus to establish a standardized method (standard user interfaco) for accessing databases.

3. Although Member States have had direct dial access to United Nations databases since 1986, the procedures for gaining access are not widely known. Often access is requested when a particular office or department in a Member State learns about a specific database, such as the bibliographic data system of the Dag Hammarskjold Library of the United Nations Secretariat or the statistical database of the Statistics Division of the Department of Economic and Social Development of the United Nations Secretariat. While more than 56 missions have access to the New York Computer Section (NYCS) mainframe computer, there has been no systematic, centralized effort to keep missions informed, and this has contributed to the overall confusion and frustration among the missions regarding access to United Nations material. It should be noted that access to United Nations databases has also been of concern to the regional commissions and other offices away from Headquarters (see paras. 18-24 below).

### Questionnaire to missions

4. As a preliminary step to determine more specifically the status of the technological infrastructure in the missions of Member States in New York and Geneva, and to identify the types of information of particular interest to them, the United Nations, in consultation with representatives of the permanent missions, prepared and circulated a questionnaire (see annex).

5. The response was unusually high for a direct mail questionnaire, indicating a high degree of interest on the part of the missions: of 350 questionnaires circulated, 123 replies were received - 46 from Geneva and 77 from New York.

6. Eighty-five per cent of those responding indicated that they used microcomputers (PCs) in support of their work, with 56 per cent having between one and five machines. Sixty-four missions, among which 13 currently had no equipment, indicated plans to acquire machines in 1992. The vast majority used PCs for word processing. However, a significant number also used the machines for electronic mail (23 per cent), accounting programs such as spreadsheets (38 per cent), access to databases (23 per cent) and individual databases (36 per cent).

7. The replies indicated a high degree of computer awareness on the part of the staff of missions. Microcomputer users at the missions fell into either the professional or the clerical category, with 70 per cent of those in the former category and 80 per cent of those in the latter using the machines.

8. To the question "Does the mission regularly receive information (about databases) from the United Nations Secretariat, from other organizations and agencies of the United Nations system, from the International Computing Centre (ICC) or from the Advisory Committee for the Coordination of Information Systems (ACCIS)?", the distribution of those responding yes was as follows: Secretariat, 20 per cent; other organizations and agencies, 8 per cent; ICC, 7 per cent; and ACCIS, 14 per cent. To questions about the accessing of specific United Nations databases, 27 per cent indicated that they accessed the United Nations Bibliographic Information System (UNBIS), the bibliographic database; 8 per cent, the statistical database; and 28 per cent, the on-line press releases.

9. The distribution of replies to the question "What United Nations information would you like to access?" was as follows:

| | |
|---|---|
| Text of documents | 79 per cent |
| Text of resolutions | 76 per cent |
| Text of treaties | 72 per cent |
| Press releases | 65 per cent |
| Bibliographic data | 53 per cent |
| Statistical data | 50 per cent |

## I. STATUS OF MOST-REQUESTED UNITED NATIONS DATABASES

Text of documents

10. As noted above, 79 per cent of the respondents indicated their interest in access to the full text of documents, confirming interest expressed by the General Assembly when it adopted resolution 44/201. Full-text accessibility of United Nations documents has long been considered a desirable goal, both by

Member States and by the United Nations Secretariat. However, until the development of optical storage technology, implementation of full-text storage and retrieval was not feasible. As has been the case with most technological developments over the last several years, the cost of the technology has continued to decline, the technology itself evolving to a point where it has now become feasible to implement a full-scale project. The optical disk project (see A/C.5/46/26) is now being implemented with the installation of an operational system in both New York and Geneva currently at the stage of final testing; it will initially provide full-text access to users with communications links to host minicomputers in New York and Geneva. The operational system now being installed will in the first phase enable missions to retrieve documents in all official languages by direct dialling. In later stages, Governments themselves and eventually other users will be able to access the system, which is designed as a world-wide network.

Text of resolutions

11. The text of resolutions was identified by 76 per cent of the respondents as one of the most desirable items of information for missions. While the optical disk system will provide this material as part of the documents database, it is now provided to a limited degree in English only by the United Nations Bibliographic Information System (UNBIS). Resolutions of the General Assembly from its thirty-sixth session (1981), resolutions of the Security Council from its twenty-ninth year (1974) and resolutions of the Economic and Social Council from its 1982 session are retrievable from the UNBIS database. The United Nations press release system (see para. 13 for further details) contains the text of Security Council resolutions included in press releases issued on the day of adoption. However, those resolutions are retained in the database for one month only.

Text of treaties

12. Interest in access to the full text of treaties was indicated by 72 per cent of the missions. While United Nations documents will be retrievable in the six official languages of the Organization on the optical disk system, the question of languages in the case of treaties is somewhat more complex, as agreements in the United Nations Treaty Series are published in the original languages of the treaties as well as in English and French. This material lends itself ideally to the use of another form of optical storage, CD-ROM (compact disk read only memory). The entire Treaty Series, consisting of over 1,500 volumes and 600,000 pages, could be stored on a single compact disk. Most major libraries now have compact disk readers, which are relatively inexpensive devices that can be attached to microcomputers. In answer to questions on CD-ROM, 10 per cent indicated that they currently used the technology, and another 25 per cent indicated their intention of acquiring it in the biennium 1992-1993. The Treaty Section of the Office of Legal Affairs of the United Nations Secretariat is currently studying how to implement the production of the Treaty Series using CD-ROM.

Press releases

13. Sixty-five per cent of the respondents wanted access to the daily press releases issued by the Department of Public Information of the United Nations Secretariat and stored in the United Nations Press Release Retrieval System (UNPRESS) system. UNPRESS is currently available on line on both the NYCS and ICC mainframes. (ICC, established in 1971 to implement resolution 2741 (XXV) of the General Assembly, is a cooperative computing facility in Geneva that operates on a pay-for-service basis. Currently 21 participating United Nations entities account for 99 per cent of the total usage. Access to ICC is also available to Member States on a pay-for-service basis.) The access menus to UNPRESS are different in New York and Geneva, and efforts will be made to ensure that the access menus are the same on both platforms. The Journal of the United Nations is also part of the information in this system, and the Department of Public Information will consult with the Office of Conference Services of the United Nations Secretariat about the possibility of adding the daily list of documents, so that independently from the optical disk system, which will also provide this information, missions will have knowledge of at least the symbol, language and title of documents on the day they are issued. The press releases in UNPRESS and other Department of Public Information material are also available through a fee-charging, on-line, public-access service called UNISER (United Nations Information Services), operated by a non-governmental organization.

Bibliographic data

14. Fifty-three percent of the missions indicated an interest in bibliographic material. The UNBIS database has been housed on the NYCS mainframe since 1979 and was made directly accessible to permanent missions in 1986. As of 1 June 1992, 60 Member States and 3 regional intergovernmental organizations were linked to UNBIS at their permanent missions in New York. Among those Member States, six had additional access through their missions in Geneva or Vienna and six had on-line access through government ministries in their home countries. In order to provide more widespread access to UNBIS data, the Dag Hammarskjold Library contributes to the Research Libraries Information Network (RLIN) database, which is accessible world wide via standard telecommunications networks.

15. UNBIS contains bibliographic references to the official documentation issued by the Organization since 1979; the documentation, inter alia, from the United Nations Conference on Trade and Development (UNCTAD) and from the regional commissions, as well as significant documents from agencies of the United Nations system; significant documents from other agencies of the common system that relate specifically to United Nations issues; and non-United Nations material acquired by the Dag Hammarskjold Library since 1980. Users in Geneva can access this material through the ICC-NYCS telecommunications link. The Library is currently working on a major re-engineering of this system that, like the optical disk database, will be housed on a dedicated minicomputer. Once the gateway computer is operational, however, the new UNBIS system will be accessed through the single entry point discussed in

paragraph 27 below. The issuing of UNBIS bibliographic, authority, factual and full-text (Security Council resolutions) files as a CD-ROM product in the near future is also planned.

16. The ACCIS secretariat has begun work on a pioneering effort to bring together on a single CD-ROM all bibliographic citations to publications in the United Nations system of organizations that are now available in machine-readable form. It is expected that this database will be available by late summer, 1993.

Statistical data

17. Member States have had access to United Nations statistical data in machine-readable form since the installation of the mainframe computing facility at Headquarters in 1965. Originally, data were supplied on magnetic tape in response to requests from Governments interested in obtaining electronic copies of the commodity trade statistics data of the Compressed International Trade Database (COMTRADE). Commodity trade data are now available on line through the United Nations Statistical Information System (UNSIS). UNSIS, which provides on-line access to a variety of statistics, was developed and is supported by the Statistics Division of the Department of Economic and Social Development of the United Nations Secretariat. In 1986, the retrieval modules were redesigned and enhanced to allow access to users outside the Statistics Division. At present, in addition to COMTRADE, national accounts, industrial production and energy databases, as well as population estimates and price indices files, are available in UNSIS. Significant changes are planned for UNSIS on an evolutionary basis, as resources become available. For example, the Statistics Division is in the process of making UNSIS databases and files available on an interactive basis with microcomputers working through networks that make them more user-friendly.

Activities of the regional commissions and major programmes

18. The regional commissions, by virtue of their mission, have long supplied data to the Member States in their areas. Many promising experimental programmes have been initiated in the regional commissions. For example, the Economic Commission for Europe (ECE) is offering Member States on-line access to the ECE Statistical Database (ECESDB), which is housed on the ICC computer. In addition, a member country has offered a PC software package that has been developed particularly for the dissemination of statistical data on diskettes. This program contains facilities for retrieving and organizing information from diskettes, as well as organizing materials retrieved from databases stored on the mainframe computer. ECE intends to use this product to improve accessibility to its statistical data and to facilitate dissemination by using a standard format.

19. Within the Economic Commission for Africa (ECA), access to ECA databases, information systems and services is possible through ECA's Pan African Documentation and Information System (PADIS). In 1990, PADIS launched a pilot project on electronic networking in order to provide increased access to its

information systems and databases. The project uses microcomputer-based communications technology, with messaging/conferencing software installed to provide dial-up data communications for electronic mail, bulletin boards and conferencing. The project has also set up public on-line access to the databases maintained on the ECA minicomputer. Users with appropriate terminal emulation software can dial up and access referral, bibliographic and text databases. It should be noted, however, that the high cost of telecommunications in member States of the Commission, together with the unsuitability for data transmission of the telephone service in some countries, limits the utilization of the system.

20. The Economic and Social Commission for Asia and the Pacific (ESCAP) has been working in coordination with United Nations Headquarters to ensure that its evolving technological innovations infrastructure conforms to international standards for open systems and is in harmony and fully integrated with the United Nations computer and communications network. Concurrently, ESCAP has been involved in coordination with its sectoral network of national focal points in member Governments to promulgate standard means of transmitting numerical, bibliographic and textual information and data.

21. The Economic and Social Commission for Western Asia (ESCWA) has disseminated data on energy, the labour force and population on diskettes to the Governments requesting the material. These databases are currently housed on stand-alone microcomputers, but the ESCWA Technological Innovations Committee is addressing issues related to the further development of databases and the dissemination of their contents.

22. The Economic Commission for Latin America and the Caribbean (ECLAC) maintains databases of economic, social and demographic statistics, as well as bibliographic references to books, articles, research reports and other documents in the economic, social and demographic fields. ECLAC regularly disseminates its databases on diskettes and magnetic tapes, and currently, the bibliographic databases are available on CD-ROM. In order to meet the needs of the countries facing shortages in telecommunications resources, ECLAC plans to disseminate information on self-contained magnetic and CD-ROM media. This means that diskettes will contain not only the data itself, but also the appropriate software needed for searching and retrieving the information needed by the users. (The Technical Working Group on Statistical Databases of the ACC Subcommittee on Statistical Activities, during its 9th meeting, held in Geneva from 29 April to 1 May 1992, made a specific recommendation regarding the provision of self-contained systems. It was generally agreed that provision of self-contained systems was the most economical option for data dissemination, being both inexpensive and easy to use. Such systems facilitate access by users to the data they require; those data may be easily downloaded for further processing using whatever software the users prefer.)

23. The United Nations Centre for Human Settlements (Habitat), with headquarters in Nairobi, maintains bibliographic and statistical databases. A policy providing Member States with access to databases through the dissemination of self-contained products has been followed by the Centre since

1989. Searches in the bibliographic database are conducted in response to ad hoc requests, and the results are mailed either in the form of either a printout or a file on diskette. Access to the statistical database, which contains material relevant to human settlements, is secured through regular dissemination of the complete system on diskettes to all member States of the Commission on Human Settlements. The complete database product runs on a standard personal computer; and no user manual is needed, as it is completely menu-driven and user-friendly.

24. For a number of years, the United Nations Conference on Trade and Development (UNCTAD) has been collecting and disseminating trade control measures information in the form of diskettes, and UNCTAD is currently studying the possibility of using CD-ROM as well.

## II. ACTIVITIES IN IMMEDIATE RESPONSE TO ECONOMIC AND SOCIAL COUNCIL RESOLUTION 1991/70

25. Since the adoption by the Economic and Social Council on 26 July 1991 of resolution 1991/70, the following undertakings have aimed at addressing some of the issues raised by the Council in the resolution:

(a) At United Nations Headquarters, activity has centred on identifying more precisely what missions require in terms of access to United Nations databases (see paras. 4-9 above);

(b) The United Nations has joined Internet, a network of networks, in order, inter alia, to facilitate access to our systems by Member States;

(c) The Electronic Services Division of the Office of General Services of the Department of Administration and Management of the United Nations Secretariat is developing plans for installing common gateway computers to simplify access to the main database systems;

(d) The Advisory Committee for the Coordination of Information Systems (ACCIS) organized a seminar, in which representatives of the United Nations Office at Geneva, ICC and the Diplomatic Committee in Geneva participated for the purpose of explaining to mission delegates the role of ACCIS and its products in facilitating access to databases of the United Nations system;

(e) The United Nations Institute for Training and Research (UNITAR) has met with representatives of the Diplomatic Committee in Geneva to explore the possibility of organizing training seminars for mission staff. Pursuant to this question, discussions have been held between the United Nations staff and UNITAR on the contents of a possible training programme in computer literacy for the diplomatic communities in Geneva and New York;

(f) ICC is developing a facility to allow user-friendly connectivity to the various computing facilities linked to it. It should be noted that this is a first step towards providing convenient on-line access to United Nations databases. However, the format of the screens presented to the user remains the responsibility of the respective substantive offices.

## III. PROBLEMS TO BE ADDRESSED, NEAR- AND LONGER-TERM SOLUTIONS AND THE COSTS THEREOF

26. The costs of the activities initiated in immediate response to resolution 1991/70 (para. 25 above) have been absorbed within existing resources, as will be the case with implementation of many of the activities discussed in paragraphs 27-31. In addition, certain projects fall within the regular programme of work of the substantive departments and offices responsible for them and are therefore represented in the programme budgets and work programmes of those units. However, to mount a truly effective, continuous effort, a professional post dedicated to coordinating the technical and informational aspects of improving access to Member States, not only in New York and Geneva, but also within the Member States themselves, would be needed in the Electronic Services Division of the Office of General Services of the United Nations Secretariat as well as in the Management Systems Section in the Budget and Management Systems Service of the Division of Administration at the United Nations Office at Geneva.

Need for user-friendly access

27. Responses to the questionnaire, as well as direct contact with missions, have served to highlight several needs that the United Nations must address in both the immediate and long term. The first priority is the need to make the access to existing United Nations databases easier for missions. Several activities can be initiated to meet this requirement:

(a) The substantive offices responsible for each database should investigate how, through programme modifications, the screens can be simplified. It should be noted, however, that major modifications will entail serious investment, with cost implications that could be determined only after the changes needed have been identified. Accordingly, the extent and timing of implementation of these measures would depend upon the overall availability of resources and relative priorities in each programme;

(b) In the longer term, efforts should be directed at developing a standard user interface. An ACCIS technical panel, including a pilot project involving selected missions in New York and Geneva, may be the most appropriate mechanism for addressing this issue. The United Nations focal point for ACCIS will raise this question of a technical panel as part of the 1993 ACCIS programme plan;

(c) The NYCS help desk should enhance the hot line services provided to missions in New York. This activity can be accommodated on a limited basis within existing resources. The Geneva community can be served directly by the ICC help desk or by NYCS via electronic mail. The funding situation at ICC is more complex, as it is funded on a fee-for-service basis, and the costs of an expanded help desk are more difficult to determine;

(d) In terms of registration for access to the ICC and the NYCS mainframes, a mutually satisfactory procedure should be established that

simplifies the registration process. This activity can be undertaken with existing resources;

(e) Linked to the ease of use of any particular system is the need to provide a single access point to all the available on-line systems, irrespective of the host platform of any particular database. For example, the optical disk project is designed so that the database is housed on a minicomputer; the same is true of the new UNBIS. Making a single call to a central routing computer, rather than having to dial different machines, can simplify access for the user. The possibility of providing for the acquisition of a gateway computer, which will allow for a single point of entry to the major on-line databases, will therefore be considered in the context of the preparation of the proposed programme budget for the biennium 1994-1995.

Need for a continuous flow of information to the Member States

28. A second requirement is to keep Member States fully and continuously informed regarding United Nations database activities. To further the meeting of this requirement:

(a) NYCS will develop an outreach programme that will encompass regularly scheduled meetings; the formation of user groups for databases of specific types (for example, statistical and bibliographic) to advise on the continuing process of system enhancement; and, if resources permit, a newsletter. These activites in and of themselves do not require additional resources. As was stated in paragraph 26 above, the entire constellation of activities associated with a coordinated approach to the improvement of access would necessitate an additional professional post in both New York and in Geneva. Clerical activities can be absorbed within existing resources;

(b) Similar activities, in Geneva, may be organized through the cooperation of the United Nations Office at Geneva, ACCIS and ICC. In addition, there should be an ICC-mission user group that is convened at least once a year;

(c) The United Nations should conduct periodic evaluations by questionnaire to ensure that the outreach programme is effective;

(d) An analysis should be made to determine the costs of producing a frequently updated version of Directory of United Nations Databases and Information Services (DUNDIS), the catalogue of databases available on line on the ICC and NYCS mainframes.

Need to have easier physical access to the databases

29. With regard to a third area to be addressed, relating to the physical availability of the data itself:

(a) More material should be made available on CD-ROM, which is a convenient and inexpensive technology for disseminating information, especially text material, such as treaties and resolutions. Cost-benefit studies of each application would be needed;

(b) For the older databases, where modifications are already being considered, the substantive offices should also investigate the possibility of re-engineering their databases to take advantage of newer technologies;

(c) When new databases are being designed, the substantive offices responsible must recognize ease of access as a prime requirement from the inception of the project;

(d) The contents of some of the existing databases might be expanded at little or no additional cost. For example, the Department of Public Information of the United Nations Secretariat may consider broadening the coverage of the UNPRESS system to include other Department of Public Information materials as well as the daily list of documents from the Office of Conference Services.

Need for training

30. Representatives of Member States have indicated an interest in courses in computer literacy. To this end UNITAR, with the advice and cooperation of the Electronic Services Division of the Office of General Services of the United Nations Secretariat (in addition to two briefings for missions on databases), is developing a series of one-hour seminars aimed at familiarizing mission staff with the basic concepts in computer technology. The United Nations will also organize, within existing resources, ad hoc seminars relating to specific databases. The cost and means of financing the UNITAR programme are yet to be determined.

Need for policy coordination

31. There is a need for a more coordinated approach to the subject of access, and access policies must be addressed, with attention paid to the marketing aspects of the subject. Specifically:

(a) The United Nations, through its Technological Innovations Board and technological innovations committees, should promulgate policies for the Organization relating to access to databases;

(b) Ease of access should be established as a prime consideration in the design and implementation of all new databases;

(c) Another longer-term project will be to incorporate the recommendation of the Technical Working Group on Statistical Databases of the ACC Subcommittee on Statistical Activities, mentioned above, by making the on-line systems self-contained, with the data easy to download.

32. Although the focus of the present report has been on the provision of improved access to United Nations databases, it is also important to expand service to Member States desiring access from their home countries. The United Nations has taken steps, as part of its ongoing efforts to upgrade its telecommunications infrastructure, to join public and private data networks. As the costs of telecommunications continue to decline, Member States will be able to benefit from a wider availability of access. A second benefit will be the ability of the missions to exchange, via electronic mail, drafts of resolutions and other documents with each other and with United Nations officials responsible for the substance of such material.

33. Finally there is a need to go beyond the confines of the United Nations itself and to coordinate questions of access and access policy with other entities in the common system. The ACCIS technical panel on standards would be a first step in this direction. Ultimately, when resources permit, consideration should be given to opening the access process to non-United Nations users.

## IV. RESOURCE IMPLICATIONS

34. The following items entail the costs that are directly attributable to the database access activities noted in the body of the report, especially in paragraphs 26 to 32. (No additional requirements would arise in the current biennium. Inclusion of provisions for such activities in the proposed programme budgets for 1994-1995 and subsequent bienniums would depend on technical factors as well as on the overall availability of financial resources and the relative priorities of activities proposed.)

(a) Two Professional posts at the P-3 and P-4 level respectively. These would be required to perform the outreach and coordination functions in the United Nations Secretariat in New York and Geneva;

(b) Provision of a single point of entry to the system of databases, regardless of the location of the computers on which the various systems are located, estimated as follows:

(i) One-time costs (total: $226,000):

a. UNIX processor (RISC-type architecture), including 20 dial-up ports and X.25 communications capability ($100,000);

b. TCP/IP communications to mainframe link ($70,000);

c. Software development ($50,000);

d. Installation of 20 trunk lines at $300 each ($6,000);

(ii) Recurring costs (total: $32,000):

a. Annual computer/software maintenance ($20,000);

b. Rental of trunk lines at $50 per line per month ($12,000).

35. The cost of re-engineering specific existing databases will be considered, subject to resource availability and relative priorities, in the context of preparation of the relevant sections of the proposed programme budgets for 1994-1995 and subsequent bienniums as will the production of CD-ROMs for various textual information, such as treaties, terminology and resolutions.

36. A proposal to establish a technical panel on database access standards will be submitted to the ACCIS Steering Committee at its next session, at which time a budget for the project will have been formulated. A second ACCIS activity, the possibility of making the Directory of United Nations Databases and Information Services (DUNDIS) accessible on line must be costed in conjunction with the International Computer Centre management. Implementation of these activities would depend upon the overall availability of resources and relative priorities.

37. The United Nations Institute for Training and Research (UNITAR) is preparing a computer literacy curriculum that would entail financial resources. These cannot be estimated until the details of the course have been worked out. The feasibility of holding related courses would depend upon UNITAR's being able to locate adequate funding.

38. It is likely that all other action items enumerated in paragraphs 26-32, especially those that fall under the direct control of the United Nations Secretariat, could be absorbed within existing resources.

## V. CONCLUSION

39. It has been possible, in the first phase of addressing the access problems that culminated in Economic and Social Council resolution 1991/70, to begin the process of providing easy, economical, uncomplicated and unhindered access to United Nations computerized databases and information systems and services. In phase two, the longer-term components, such as acquisition of the gateway computer and provision of a continuous computer literacy training programme, will require additional resources. The goal of phase two will be to fully implement the requirements stated in the Council resolution, not only for missions, but for the capitals of Member States as well.

ANNEX

United Nations Database Questionnaire



Your help in completing the following questions will assist us in analyzing and improving current data base services and allow us to prepare for your future needs. If you have questions about completing this form, please call or write to Ms. Carole Thompson.

**Note: Additional sheets may be used if necessary.**

PLEASE PRINT OR TYPE YOUR ANSWERS.

| Please return this completed form by 13 March to: |
|---|
| Ms. Carole Thompson<br>Director<br>Electronic Services Division<br>OGS/DAM, Room S-1912 |
| Fax: (212) 963-0335 Phone: (212) 963-6472 |

1. Does the Mission use a microcomputer (PC) in its day-to-day work? ☐ Yes ☐ No

If yes, how many PCs are there? ☐ Please indicate what they are used for (check all that apply):

| | | | |
|---|---|---|---|
| ☐ Word Processing | ☐ Database (private) | ☐ Electronic Mail | ☐ |
| ☐ Spread Sheets | ☐ Database access | ☐ Local Area Network (LAN) | ☐ |

Are there plans to acquire PC's in 1992? ☐ Yes ☐ No In 1993? ☐ Yes ☐ No

2. How many people in your Mission use PCs? Professional: ☐ Secretarial: ☐

3. Is CD-ROM used? ☐ Yes ☐ No If no, are there plans to use CD-ROM in 1992 - 1993? ☐ Yes ☐ No

4. Does the Mission regularly receive information from:

| Yes | No | |
|---|---|---|
| | | UN Secretariat about data bases |
| | | Other UN organizations and agencies about data bases |
| | | ACCIS - Advisory Committee for the Co-ordination of Information Systems |
| | | ICC - International Computing Center |
| Others - please specify | | |
| | | |
| | | |

5. Does your Mission now access these UN Secretariat data bases? (if "other", please specify)

| | No | Yes | | Computer | | Ease of Use | | Timeliness | |
|---|---|---|---|---|---|---|---|---|---|
| | | Often | Rarely | ICC Geneva | NYCS New York | Ok | Difficult | Ok | Late |
| UNBIS - Bibliographic | | | | | | | | | |
| COMTRADE - Statistical | | | | | | | | | |
| UNPRESS - Press Releases | | | | | | | | | |
| Other | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Comments on the above: |
|---|
| |
| |

6. Does your Mission access databases in other UN organizations and specialized agencies, such as FAO or IAEA?

☐ Yes ☐ No If yes, please indicate below:

| Database Name | Organization Name | Usage | | Computer Location | Ease of Use | | Timeliness | |
|---|---|---|---|---|---|---|---|---|
| | | Often | Rarely | | Ok | Difficult | Ok | Late |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

7. Is there other UN information that the Mission would like to access by computer? ☐ Yes ☐ No

If yes, please specify:

| | | |
|---|---|---|
| ☐ Bibliographic | ☐ Text of resolutions | ☐ Other (please specify) |
| ☐ Statistical | ☐ Text of treaties | |
| ☐ Press releases | ☐ Text of documents | |

8. What method of computer access is used? (check all that apply)

| | | | | |
|---|---|---|---|---|
| ☐ Direct Dial-Up | ☐ Bitnet | ☐ Euronet | ☐ Internet | ☐ PDN (Telenet, Telepak, etc) |

Others

Has any difficulty been encountered? ☐ Yes ☐ No If yes, please explain below:

9. For those answering yes to questions 5 and/or 6 above, how is the information used? (check all that apply)

| | |
|---|---|
| ☐ Read only | ☐ Other - please specify |
| ☐ Downloading for storage | |
| ☐ Downloading for manipulation | |

10. Please comment about the ease of use and access to UN data bases.

11. Does the Mission subscribe to external on-line data services? ☐ Yes ☐ No

If yes, please indicate their names below (if "other", please specify):

| | | | |
|---|---|---|---|
| ☐ CompuServe | ☐ Reuters | ☐ CONNECT GmbH | ☐ ESA-IRS |
| ☐ NEXIS/LEXIS | ☐ UPI | ☐ Data -Star | ☐ OTHER |
| ☐ Prodigy | ☐ Telerate | ☐ Maxwell Online | |
| ☐ Dow Jones | ☐ Dialog | ☐ Telesystems-Questel | |

12.

| Name of person completing this questionnaire | Title | Date |
|---|---|---|
| PLEASE PRINT | | |

13.

| Mission | Fax Number | Phone Number |
|---|---|---|
| | | |

11/2/92

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